

The hours of observation are 8 a. m. and 8 p. m. central time, or 7 a. m. and 7 p. m. eastern time.																														
Clouds.	Abbr.	Approximate altitude, ft.	10th, a.m.	10th, p.m.	11th, a.m.	11th, p.m.	12th, a.m.	12th, p.m.	13th, a.m.	14th, a.m.	14th, p.m.	15th, a.m.	15th, p.m.	16th, a.m.	16th, p.m.	17th, a.m.	17th, p.m.	18th, a.m.	18th, p.m.	19th, a.m.	19th, p.m.	20th, a.m.	20th, p.m.	21st, a.m.	21st, p.m.	22d, a.m.	22d, p.m.	23d, a.m.	23d, p.m.	24th, a.m.
Sky color	c	30,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrus	cs	25,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirro-stratus	cs	25,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirro-cumulus	ck	23,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alto-stratus	as	19,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alto-cumulus	ak	10,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Strato-cumulus	sk	6,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cumulus	k	4,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cumulo-nimbus	kn	3,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nimbus	n	2,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fracto-nimbus, or scud.	fn	1,500	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stratus	s	1,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fog	f	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wind	w	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cloud Bank	cb	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Hourly record of clouds, Friday, October 15, 1899, at Cincinnati Observatory. Local mean time, civil reckoning.

Clouds.	Altitude.	Midnight.	1 a.m.	2 a.m.	3 a.m.	4 a.m.	5 a.m.	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	11 a.m.	Noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.
Sky color	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrus	c	30,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirro-stratus	cs	25,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirro-cumulus	ck	23,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alto-stratus	as	19,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alto-cumulus	ak	10,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Strato-cumulus	sk	6,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cumulus	k	4,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cumulo-nimbus	kn	3,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nimbus	n	2,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fracto-nimbus, or scud.	fn	1,500	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stratus	s	1,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fog	f	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wind	w	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cloud bank	cb	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

altitudes change from hour to hour and day to day. The color of the sky between the clouds is quite an important item, and is entered on the topmost column as it was always given in the Cincinnati record.

The record of local cloudiness given in these tables is assumed to refer only to that portion of the heavens within 60° of the zenith. The record of clouds within a few degrees of the horizon seems to need a separate table or circular diagrams at the bottom of the columns in this table. The mere fact that a cloud bank exists in some distant portion of the horizon may, however, be entered on the bottom line opposite cb. The abbreviations that enter the table proper are quite simple, viz, c=clear; cl.=cloudy; l.b.=light blue; d.b.=deep blue; h.=hazy; s.=smoky; n.=north; s.=south; e.=east; w.=west.

IN MEMORY OF PROF. WILLIAM FERREL.

By P. CONNOR, Observer Weather Bureau, Kansas City, Mo.

The late Prof. William Ferrel directed in his will that his library, which contained so many valuable works on meteorology and astronomy, be given to the Academy of Sciences of Kansas City, Mo., for use as long as that organization exists; but that in case of its dissolution the library should go to Park College, Parkville, Mo., about eighteen miles north of Kansas City.

The Academy of Sciences having received the library, placed it, together with the other collections of the Academy, in what is known as the "Building of the Scarritt Training School." At the present time, the Academy is holding its meetings in the new public library, and is making an effort to have Ferrel's library transferred to that building, in order to make it accessible to the public. The library consists of at least two ordinary wagon loads of bound volumes, pamphlets and manuscripts; it is almost altogether technical, and must be of little consequence in a training school for nurses and religious workers. It should be set apart and catalogued as a distinct section of the public library for public benefit, but remain, of course, the property of the Academy of Sciences, in order to comply with the provisions of the will.

It will interest many of the readers of the MONTHLY WEATHER REVIEW to learn that Professor Ferrel is buried in a very attractive location in the Cemetery at Maywood, Kansas, in a spot selected by himself not long before his death.

The modesty and simplicity which characterized Ferrel's earlier life were manifest to the last. When he realized that the closing paragraph of his life's story was being written, and that the rosy tints of the sunset of life would soon dissolve into the velvet darkness of death, his simple sensitive nature desired that no stone be erected to direct the attention of the world to the little mound beneath which he slept. Subsequently, however, his brother, Dr. Jacob Ferrel of Kansas City, honored the Professor's memory by erecting on the grave a large and handsome monument of Vermont granite. It affords me much pleasure to be able to send a photograph of the monument. (See Chart XI.)

Although Professor Ferrel's life was appropriately noticed elsewhere at the time of his death (September 18, 1891), yet nothing of the kind seems to have been published in the MONTHLY WEATHER REVIEW, and I therefore venture to submit the following brief items.

Some biographical sketches in possession of his nephew, Mr. C. M. Tabler, Maywood, Kans., state that Bethany College, West Virginia, offered him the chair of mathematics when he graduated, in 1844, but for some unaccountable reason the offer was refused, and instead, Ferrel went west, to Liberty, Mo., and there engaged in school teaching for two years. Thence he went to Allensville, Todd County, Ky., and taught a private school for two or three years. From Allensville he was called to take charge of a commercial and high

school in Nashville, Tenn. In 1857 he resigned this to accept an appointment as assistant in the preparation of the Nautical Almanac, and thereupon removed to Cambridge, Mass. His subsequent career is well known until the time he left the Government service in 1887. After that he made his home in Kansas City, Mo.

While visiting a sister in Martinsburg, W. Va., he was attacked by "Grippe," from which he never fully recovered. Later he was attacked by dropsy, which was the immediate cause of his death. Three months before his death he went west on a visit to his nephew-in-law, C. M. Tabler, Maywood, Kans., but death was in close pursuit and he never returned.

William Ferrel was of Scotch-Irish descent. His grandfather came from the north of Ireland to Pennsylvania and married an English woman named Veach. Their son, Benjamin, married Nancy Miller, whose union was blessed with 8 children, the professor being the eldest. Professor Ferrel was a man actuated by a single and serious purpose, to accomplish which, he labored with unswerving fidelity. From his boyhood years until old age and disease combined to give his ceaseless spirit rest, his life was one long line of direct purpose and pursuit in the interest of science. He was a man of extreme diffidence and seclusion, who made companions of books, and found pleasure in studying the problems of nature rather than in the social circle of relatives and friends. His whole career shows not the slightest tinge of romance or sentimentality. Humor or frivolity found no lodging in his master mind. The "little nonsense now and then" alleged to be "relished by the wisest men," was not appreciated by this philosopher. He was a man without prejudice or wordly greed; without "hobbies" or side issues. He met with obstacles to the fruition of cherished plans, yet disappointments did not discourage him.

In early life he joined the Campbellite Church (a reason given for his having entered Bethany College, whose founder was Alexander Campbell, founder of the Campbellite Church), but in later years he adopted Unitarianism, and after going to Kansas City to reside permanently, he attended that church.

At the time of his death, a conservative estimate of his estate, not including his library, placed it at about \$30,000, invested in improved and unimproved property in Kansas City, Mo., Hutchinson, Kans., Richhill, Mo., and Washington, D. C.

MEXICAN CLIMATOLOGICAL DATA.

Through the kind cooperation of Señor Mariano Bárcena, Director, and Señor José Zendejas, vice-director, of the Central Meteorologico-Magnetic Observatory, the monthly summaries of Mexican data are now communicated in manuscript, in advance of their publication in the *Boletín Mensual*; an abstract translated into English measures is here given in continuation of the similar tables published in the MONTHLY WEATHER REVIEW since 1896. The barometric means have not been reduced to standard gravity, but this correction will be given at some future date when the pressures are published on our Chart IV.

Mexican data for October, 1898.

Stations.	Altitude.	Mean barometer.	Temperature.			Relative humidity.	Precipitation.	Prevailing direction.	
			Max.	Min.	Mean.			Wind.	Cloud.
Leon (Guanajuato)...	5,934	24.32	80.1	37.2	62.1	54	0.77	ene.	ne., e.
Linares (New Leon)...	1,188	28.76	93.2	44.6	75.0	70	T.	sse.	ne.
Mazatlan.....	25	29.82	90.0	71.8	83.0	80	9.25	nw.	ne.
Merida (Yucatan)....	50	29.90	96.8	61.9	77.0	81	6.87	n.	n.
Mexico (Obs. Cent.)...	7,472	23.09	74.3	38.3	57.7	62	0.21	nw.	ne.
Morelia (Seminario)...	6,401	23.99	77.4	41.5	61.5	69	0.57	ene.	e.
Oaxaca.....	5,164	25.08	84.0	42.4	66.2	66	0.88	nw.	ne.
Puebla (Col. Cat.)...	7,112	23.32	77.9	34.7	60.8	65	2.35	nne.	s.
San Isidro.....	.....	.....	75.2	55.4	.....	.....	0.47	ne., s.	.....
Tuxpan (Vera Cruz)...	30.32	93.2	54.0	75.7	78	1.31	.....	ne., nw.	e.
Zacatecas.....	8,015	22.54	80.6	32.7	59.0	62	0.61	e.	e.

OBSERVATIONS AT PORT AU PRINCE, HAITI.

Through the kind cooperation of Prof. T. Scherer of Port au Prince, Haiti, the meteorological observations taken by him at 7^h 12^m a. m., local time, or noon, Greenwich time, are communicated in manuscript for early publication in the MONTHLY WEATHER REVIEW. The original reports are in metric measures; the conversions are by the Editor.

The barometer is 119 feet above sea level; its readings have been corrected by Professor Scherer for temperature and elevation, and also since July 1, 1898, for gravity; this latter correction is -0.064 inch; the thermometers are 6.7 feet above ground; the rain gauge, 7.2 feet above ground. The wind velocity is given in miles per hour.

The position of Port au Prince, Haiti, is latitude 18° 34' N., longitude 72° 21' W., or 4^h 49^m west of Greenwich. Additional records for this station are published in the annual volumes of the Central Meteorological Institute at Vienna.

Observations at Port au Prince, Haiti.

SEPTEMBER, 1898.

Date.	Pressure.		Temperature.			Wind.	Clouds.			Preceding 24 hours.		
	Local.	Sea level.	Dry.	Wet.	Dew-point.		Kind.	Amount.	Direction.	Temperature.	Max.	Min.
1.....	Inch.	Inch.	°	°	°	*				°	°	Inch.
1.....	29.84	29.96	78.6	72.1	68.2	73	e.	22	cs	89.6	73.1	0.00
2.....	29.82	29.94	79.5	73.4	69.8	73	e.	22	cs	94.3	72.3	0.09
3.....	29.80	29.93	73.4	70.2	68.2	84	.....	0	cs	89.2	75.0	0.10
4.....	29.82	29.94	77.2	73.2	70.9	82	ese.	7	cs	73.2	72.9	0.00
5.....	29.87	29.99	79.5	72.7	68.5	70	se.	9	cs	91.2	72.5	0.00
6.....	29.85	29.98	74.3	72.3	71.2	90	.....	0	s	94.3	72.5	0.00
7.....	29.80	29.93	74.5	70.3	67.6	80	se.	5	k	90.3	71.6	0.00
8.....	29.80	29.93	73.6	70.0	67.3	87	.....	0	k	90.0	70.0	0.00
9.....	29.80	29.93	73.2	73.9	74.1	97	e.	22	k	91.9	70.5	0.47
10.....	29.80	29.92	77.9	72.9	69.8	77	e.	22	ks	85.3	70.3	0.00
11.....	29.78	29.91	79.8	71.6	70.3	99	.....	0	cs	94.8	70.5	0.04
12.....	29.75	29.88	75.7	74.5	73.8	94	.....	0	cs	91.9	71.4	0.19
13.....	29.75	29.88	73.4	72.7	72.3	96	e.	22	s	90.1	72.1	0.00
14.....	29.74	29.87	76.3	74.1	72.7	90	.....	0	k	87.4	71.1	0.00
15.....	29.71	29.84	77.2	74.8	73.6	90	.....	0	.....	88.2	73.2	0.00
16.....	29.76	29.89	77.4	73.8	71.8	83	.....	0	k	85.3	74.7	0.00
17.....	29.76	29.95	79.0	74.7	72.3	87	ese.	5	cs, k	91.8	73.1	0.00
18.....	29.84	29.96	76.3	74.8	73.8	91	.....	0	k	90.3	75.9	0.64
19.....	29.81	29.93	78.1	73.0	70.2	77	e.	5	cs	90.3	73.8	0.00
20.....	29.83	29.96	75.6	71.2	68.5	80	e.	2	k	89.7	73.0	0.10
21.....	29.80	29.93	75.6	70.9	68.0	78	.....	0	k	87.6	71.4	0.00
22.....	29.81	29.93	75.9	73.9	72.9	91	.....	0	k	87.6	72.3	0.00
23.....	29.75	29.88	72.9	72.1	71.6	95	se.	2	cs	88.9	74.1	1.34
24.....	29.76	29.89	74.5	73.0	72.1	92	.....	0	k, n	86.7	69.1	0.19
25.....	29.76	29.89	75.2	72.1	70.2	85	e.	5	k	85.3	72.7	0.00
26.....	29.76	29.89	75.2	72.3	70.5	86	.....	0	cs	89.6	72.0	0.00
27.....	29.77	29.89	75.9	73.0	71.4	86	.....	0	cs	89.6	71.6	0.00
28.....	29.75	29.88	76.3	74.8	73.7	87	e.	1	cs	89.4	72.0	0.00
29.....	29.71	29.84	76.8	75.0	73.9	91	.....	0	k, cs	88.7	75.6	0.00
30.....	29.65	29.77	76.5	75.7	73.8	92	se.	5	cs	87.3	73.9	0.00
Sum.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.15
Means	29.78	29.91	76.1	73.0	71.1	85.0	.....	2.0	.....	89.4	72.3	.....

NOTE.—According to the new form recently received from the Weather Bureau the above barometric pressure, reduced to sea level, has also received the correction -1.57 millimeters for reduction to standard gravity. This correction was first applied for the month of July, and will be so continued hereafter.—T. S.

[Apparently the gravity correction has also been applied by Professor Scherer to the barometric readings before reduction to sea level, so that in these columns we have the true local pressure as well as the true sea-level pressure. This is in accordance with the instructions on Form 1040, which read as follows:

"Under local pressure enter the observed reading of the barometer after correcting for all known sources of instrumental error, including capillarity, error of scale or zero point, temperature of scale or mercury, or of the vacuum box in the case of an aneroid, and the variations of the force of gravity from normal gravity. If any of these corrections are unknown or unattended to, please state that fact."—Ed.]

The barometer is corrected for temperature, instrumental error and gravity, and reduced to sea level for a height of 37 meters.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made nearly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Chart XI. Monument to William Ferrel.



William Ferrel, born January 29, 1817, died September 18, 1891.

"By lifelong devotion to astronomy, geodesy, and meteorology, he promoted science, benefitted mankind, and gained a high position among the philosophers of the world."